



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,512	06/09/2005	Koji Ishii	070591-0034	3151
20277	7590	09/28/2006	EXAMINER	
MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			BLACKMAN, ROCHELLE ANN J	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/538,512	Applicant(s) ISHII ET AL.	
	Examiner Rochelle Blackman	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/9/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because the abstract not in a single paragraph; and on lines 6 and 9 of the abstract, reference number 23 is missing parentheses. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuroda et al. (JP Patent No. 2001-068293).

Regarding claim 1, Kuroda discloses a projection type video display (Drawings 1-4) that modulates light emitted from a light source (see 7 of Drawings 3 and 4) by a light valve (see 8 of Drawings 3 and 4) and projects the modulated light (see function of 9 in Drawings 3 and 4), comprising: an ion wind generator (see 1-4 of Drawings 1-4) for generating air flow by ionizing air and molecules in the air using an electrode on one side (see 1 of Drawings 1-4) and drawing ions generated by the ionization by an electrode on the other side (see 8 of Drawings 3 and 4 and see abstract and

paragraphs [0011] and [0012] – element 8 is the dust adhesion prevention or anti-ticking object that is electrified to the same polarity as the ionized air thus creating “an electrode on the other side”); and an ozone removal filter (see 5 of Drawings 1-4) provided on a path of the air flow.

Regarding claim 2, Kuroda discloses a projection type video display according to claim 1, wherein the ozone removal filter is provided on a path of the air flow warmed by drawing heat generated in the video display (see location of 5 in Drawings 3 and 4).

Regarding claim 3, Kuroda discloses a projection type video display according to claim 1, wherein the ozone removal filter is provided in a position on a path of the air flow and in the vicinity of the light source (see location of 5 in Drawings 3 and 4).

Regarding claim 5, Kuroda discloses a projection type video display according to claim 1, wherein the ion wind generator is so provided as to take air outside the video display into the video display (see *air duct of cooling fan* in abstract – air is considered to be taken from outside the “video display” in order for the “ion wind generator” to function).

Regarding claim 6, Kuroda discloses a projection type video display according to claim 5, wherein dust is caught by the electrode on the other side of the ion wind generator (see paragraphs [0011] and [0012]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (JP Patent No. 2001-068293) in view of Heintz et al. (U.S. Patent No. 6,056,405).

Regarding claim 4, Kuroda discloses the claimed invention except for the reflector composing the light source transmitting "infrared light and the infrared light is guided to the ozone removal filter".

Heintz teaches providing a reflector (106 of FIG. 3) composing a light source (see 112 of FIG. 3) that transmits infrared light (see col. 7, lines 9-11) and a fan that directs cooling air flow through openings in a lamp frame and across the lamp-reflector assembly.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a "reflector that transmits infrared light" in the Kuroda reference, as taught by Heintz as well as "guide the infrared light to the ozone filter", for the purpose of facilitating cooling of the reflector and light source and reduce heat transfer from the light source (see col. 3, lines 21-27).

2. Claims 7/1, 7/2/1, 7/3/1, 7/5/1, 7/6/5/1, 8/1, 8/2/1, 8/3/1, 8/5/1, and 8/6/5/1 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (JP Patent No. 2001-068293) in view of Tenney (U.S. Patent No. 3,899,684).

Kuroda discloses the claimed invention except for “a sensor for detecting temperature or ambient temperature of the ozone removal filter; and a control means for turning on the ion wind generator when the temperature is equal to or higher than predetermined temperature and turning off the ion wind generator when the temperature is lower than the predetermined temperature; wherein the ion wind generator is turned on or off when a predetermined time period has passed after the ion wind generator was turned on or off”.

Tenney teaches providing a sensor (see 37 of FIG. 1) for detecting temperature or ambient temperature of a ozone removal filter (see 2 of FIG. 1); and a control means (see 39 of FIG. 1) for turning on the ion wind generator when the temperature is equal to or higher than predetermined temperature and turning off the ion wind generator when the temperature is lower than the predetermined temperature (see col. 5, line 38 to col. 6, line 20); wherein the ion wind generator is turned on or off when a predetermined time period has passed after the ion wind generator was turned on or off (also see col. 5, line 38 to col. 6, line 20).

It would have been obvious to one ordinary skill in the art at the time the invention was made to provide the ozone removal filter and ion wind generator with a “sensor” and a “control means” in the “projection type video display” of the Kuroda reference, as taught by Tenney for the purpose of preventing overheating of ion wind generator and ozonized air in the “projection type video display” (see col. 2, lines 20-25).

3. Claims 7/4/3/1 and 8/4/3/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (JP Patent No. 2001-068293) in view of Heintz et al. (U.S. Patent No. 6,056,405) as applied to claim 1 above, and further in view of Tenney (U.S. Patent No. 3,899,684).

Kuroda and Heintz discloses the claimed invention except for “a sensor for detecting temperature or ambient temperature of the ozone removal filter; and a control means for turning on the ion wind generator when the temperature is equal to or higher than predetermined temperature and turning off the ion wind generator when the temperature is lower than the predetermined temperature; wherein the ion wind generator is turned on or off when a predetermined time period has passed after the ion wind generator was turned on or off”.

Tenney teaches providing a sensor (see 37 of FIG. 1) for detecting temperature or ambient temperature of a ozone removal filter (see 2 of FIG. 1); and a control means (see 39 of FIG. 1) for turning on the ion wind generator when the temperature is equal to or higher than predetermined temperature and turning off the ion wind generator when the temperature is lower than the predetermined temperature (see col. 5, line 38 to col. 6, line 20); wherein the ion wind generator is turned on or off when a predetermined time period has passed after the ion wind generator was turned on or off (also see col. 5, line 38 to col. 6, line 20).

It would have been obvious to one ordinary skill in the art at the time the invention was made to provide the ozone removal filter and ion wind generator with a

Art Unit: 2851

"sensor" and a "control means" in the "projection type video display" of the combined Kuroda and Heintz reference, as taught by Tenney for the purpose of preventing overheating of the ion wind generator and ozonized air in the "projection type video display" (see col. 2, lines 20-25).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1, 3, and 4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 7 of copending Application No. 10/944,825. Although the conflicting claims are not identical, they are not patentably distinct from each other because the "projection type video display..." of claim 1 is met by the *projection type video display* of claim 1 of copending

app. '825; the "ion wind generator..." of claim 1 is met by the *wind blower* of claim 1 of copending app. '825; the "ozone removal filter..." of claim 1 is met by the *ozone removal filter* of claim 1 of copending app. '825; the "ozone removal filter is provided in a position on a path of airflow and in the vicinity of the light source" of claim 3 is met by the ...*wind blower and the ozone removal filter are arranged behind the light source* of claim 1 of app. '825; and the "reflector composing the light source transmits infrared light and infrared light is guided to the ozone removal filter" of claim 4 is met by the *light source comprises a cold lamp whose reflector is constructed with a cold mirror which transmits infrared ray and, the infrared ray emitted from the cold lamp is introduced into the ozone removal filter* of claim 7 of copending app. '825.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

2. Claims 1 and 3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 8 of copending Application No. 11/087,736. Although the conflicting claims are not identical, they are not patentably distinct from each other because the "projection type video display..." of claim 1 is met by the *projection type video display* of claim 1 of copending app. '736; the "ion wind generator..." of claim 1 is met by the *wind blower* of claim 1 of copending app. '736; the "ozone removal filter..." of claim 1 is met by the *catalyst filter* of claims 1-3 and *ozone removal filter* of claim 8 of copending app. '736; and the "ozone removal filter is provided in a position on a path of airflow and in the vicinity of the light source" of claim 3 is met by the ...*wind blower and the catalyst filter are arranged*

behind the light source of claim 2 and ozone removal filter being arranged at the back of said catalyst filter arranged at the back of said light source of claim 8 of app. '736.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ishii et al. (U.S. Patent Application Publication No. 2005/0237500), Projection Type Image Display Unit – publication of a copending application.

Ikeda et al. (U.S. Patent Application Publication No. 2005/0077103), Projection Type Video Display Unit – publication of a copending application.

Ikeda et al. (U.S. Patent Application Publication No. 2005/0213048), Projection Type Video Display Unit – publication of a copending application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (571) 272-2113. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2851

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Rochelle Blackman', with a long, sweeping horizontal line extending to the right.

Rochelle Blackman
Patent Examiner

RB